

ABSTRACT

A process for the coating of substrates comprising insertion of a substrate into a process oven, dehydration of the substrate, withdrawal of a metered amount of one or more chemicals from one or more chemical reservoirs, vaporizing the withdrawn chemicals in one or more vapor chambers, and transfer of the vaporized chemicals into a process oven, thereby reacting with the substrate. An apparatus for the coating of substrates comprising a process oven, a metered chemical withdrawal subsystem, and a vaporization subsystem.